

NEW LEPIDOPTERA FROM THE NEW JERSEY  
PINE BARRENS.

BY FREDERICK LEMMER, Lakehurst, N. J.

Three new melanistic forms of Phalaenidae<sup>1</sup> and one new species and one melanistic form of Geometridae are described.

PHALAEINIDAE.

HADENINAE.

*Polia adjuncta benjamini* new form. A melanistic form of *adjuncta* Bdv.

Fore wing with all of the normal white replaced by sordid smoky luteous. Hind wing dull smoky, tinged with luteous and lacking the normal contrasts.

*Type locality*: Lakehurst, N. J.

*Number and sexes of types*: Holotype ♂, May 21-31; Allotype ♀, September 4, captured by the author. Also one paratype ♂ from New Lisbon, N. J., August 31, 1934 (Dr. Emlen P. Darlington) and one paratype ♂ from Cranford, N. J., June 4 (Mr. Otto Buchholz), in their respective collections. Reared on golden glow by Dr. Darlington. Holotype deposited in the U. S. National Museum. Allotype in the author's collection.

Named in honor of my good friend, the late Mr. Foster H. Benjamin.

APATELINAE.

*Apatela afflicta schmalzriedi* new form. A melanistic form of *A. afflicta* Grote.

Agrees perfectly with *afflicta* in all structures including the genitalia. Differs by having most of the normal markings of the fore wing hidden by a heavy powdering of black and blackish-brown scales; with the white ring of the orbicular, three minute white costal points, a few white scales in the sub-terminal line, and the checkered white fringe, strongly discolourous with the black ground. Hind wings of all but one normal. The latter specimen has the hind wings darker than normal, which occasionally occurs in otherwise typical *afflicta*. The fore wings are not quite as melanistic as in the other specimens although the orbicular outline is pale.

*Type locality*: Lakehurst, N. J.

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<sup>1</sup> Noctuidae of Authors.

*Holotype*: ♂, May 11-20, 6 paratypes, ♂♂, June 11-20, August 21-31, also Lakehurst, N. J.

*Notes*: Captured by the author. Holotype and last-mentioned paratype deposited in the U. S. National Museum, five paratypes in the collection of the author.

Named in honor of my friend, Dr. Elmer W. Schmalzried.

#### CATOCALINAE.

*Catocala sordida engelhardti* new form. A melanistic form of *sordida* Grote.

Primaries dark brown. Inner margin black as usual. T. a. and t. p. lines at costa, also median shade at that point black. Continuations practically lost in the dark brown. Veins of primaries and outline of reniform black. Fringes darker as in normal specimens. Light bands of underside grayish white at costa. Base of costa grayish white. Secondaries and underside normal. Thorax dark brown. Collar lappet black tipped with light gray. Palpi dark brown tipped with light gray. Face dark brown. Legs dark brown with joints grayish white. Few grayish white scales interspersed all over primaries and thorax.

*Type locality*: Lakehurst, N. J.

*Number and sexes of types*: Holotype ♂, July 9, 1932; Allotype ♀, July 10, 1932; paratype ♀, July 5, 1933.

*Notes*: Allotype deposited in the U. S. National Museum, holotype and paratype in the author's collection.

Named in honor of my friend, George P. Engelhardt.

#### GEOMETRIDAE.

##### GEOMETRINAE.

*Apaecasia atropunctata darlingtoni* new form. A melanistic form of *A. atropunctata* Packard.

Forewings: basal area from middle of inner margin to center of apex medium brown, from there to outer margin including fringes blackish brown, no sharp lines separating the areas. Secondaries similar except that basal third is a shade lighter than inner area of primaries, but the outer two-thirds as dark as these. Basal band of primaries brown, in *atropunctata* black. The brown bands through center of both wings present but somewhat darker. The black spots on both wings more numerous. Discal spots present. Two black spots on second segment of body of females as in *atropunctata*. Two black spots each on second, third and fourth segments of body

of male. Black dotted line of secondaries indicated. A row of light spots outside of and adjoining the black spotted rows on both wings of upper side of male. These light spots are traceable in ♀ but are practically lost in the dark scales. Underside darker, especially between dotted lines and outer margin. It shows dotted lines and discal spots more clearly. There is also a row of black dots at base of fringes, one between every vein which only one specimen of *atropunctata* of nine before me shows though more faintly. This applies to the ♀ of the new form especially. In the male they are very faint and some are entirely missing. Head brown.

*Type locality*: New Lisbon, Burlington Co., N. J.

*Sexes of types*: Holotype ♂, June 1, 1935; Allotype ♀, May 5, 1930, both caught at light by Dr. Emlen P. Darlington and both in his collection.

I take pleasure in naming this form for Dr. Darlington.

### ***Pseudoboarmia buchholzaria* n. sp.**

Related to *umbrosaria* Hübner, of which I consider *gnopharia* Guenée a synonym.

Markings similar, variable, but the ground color always dark, fuscous bathed with some dull violaceous and more or less sparsely powdered with scattered violaceous white scales.

The male genitalia are similar to those of *umbrosaria*, but differ by the weaker spines of the aedeagus and by the possession of a somewhat smaller clasper, which is less heavily armed with spines.<sup>2</sup>

No specific difference was observed in the female genitalia.

No trace of any hair pencil was found on any specimen of the long type series of the present species. Male specimens of *umbrosaria* seem consistently to possess hair pencils on the hind tibiae. These pencils are occasionally lost by rubbing, but usually a few hairs remain, or at least the points of origin can be discerned.<sup>3</sup>

This character holds true in a long series of *umbrosia* from N. J., N. C., Fla. and Tex., as well as in the probable male type

<sup>2</sup> Ten slides of the male genitalia: Five made from specimens of the present new species, from Lakehurst, N. J. (4) and "Fla." (1); and five made from specimens of *umbrosaria* from N. J., Fla., Tex. and "Am. Bor." (supposed type male of *gnopharia*), have been studied.

<sup>3</sup> McDunnough, 1920, Tech. Bull. XVIII, Entom. Branch, Canadian Dept. Agr., page 22, lists hair pencils present or absent, suggesting that two geographical races are involved, a Florida race possessing hair pencils, and a more northern race lacking them.

of *gnopharia*<sup>4</sup> now in the U. S. National Museum *via* the Barnes collection.

*Type locality*: Lakehurst, N. J.

*Other localities*: Southern Pines, N. C. (1 ♂, 1 ♀) and "Fla." (1 ♂), according to specimens in the U. S. National Museum.

*Number and sexes of types*: Holotype ♂, allotype ♀, 127 ♂, 61 ♀ paratypes, various dates, May to August, all collected by the author at Lakehurst, N. J.

*Food plant*: Sweet fern (*Comptonia asplenifolia* L.).

*Notes*: Holotype ♂, allotype ♀, and 47 ♂, 25 ♀ paratypes deposited in the U. S. National Museum; 6 ♂, 6 ♀ Buchholz collection; 74 ♂, 30 ♀ paratypes in the author's collection.

Named for my friend, Otto Buchholz.

A specimen of the present new species is in the U. S. National Museum ex Collection of the Brooklyn Museum; it is labeled "*Selidosema fuliginaria* Type Hulst" in Hulst's handwriting but bears the locality label "Fla." instead of "Ill." and further violates the original description of *fuliginosa* by the possession of large, well-marked, ovate discal spots on all wings. This specimen must be considered a spurious type.

"*Selidosema gnophosarium*" (!) of Barnes and McDunnough (nec Guenée), (1912, Contrib. Nat. Hist. Lep. N. Am., I (4), 19, pl. VIII, f. 15), seems to fall to the present species. The figured specimen, a female labeled "So. Pines, N. C.," is in the U. S. National Museum, as is a single corresponding male from the same locality. This male lacks an abdomen so that the genitalia cannot be compared. However, no traces of any hair pencils could be found.

In the original description of *gnopharia*, Guenée (1857, Spec. Gén., IX, Phal., I, 251) cites the food plant, oak. The author has reared larvae of *umbrosaria* on white birch (*Betula populifolia* Marsh). They starved to death when given sweet fern, the food plant of *buchholzaria*.

**A Psammocharid at a High Altitude.**—On Aug. 13, 1936, my wife and Miss Hester Rohwer found a Psammocharid wasp among rocks at 12,000 ft. on the Trail Ridge Road, Colorado. I suppose this is the highest altitude known for a wasp of this group. The species has been determined by Dr. Nathan Banks as *Anoplius luctuosus* Cresson. The spiders found at the same time and place was sent to Mr. W. J. Gertsch, and prove to be species of *Pellenes*, *Drassodes*, *Titanibs* (*T. pepinensis* Gertsch) and *Thantus*.

T. D. A. COCKERELL, Boulder, Colo.

<sup>4</sup> See Oberthür, 1913, Ét. Lép. Comp., VII, 274.